

I B. Tech I Semester Regular Examinations, January, 2015
Instrumentation in Biotechnology
(Biotechnology)

Time: 3 hours

Max Marks: 70

PART – A**Answer ALL questions. All questions carry equal marks**

2 * 10 = 20 Marks

- 1). a Write about Systemic Errors. [2]
- b What is S/N Ratio? [2]
- c Define Sterilization. [2]
- d Write about the Filter used in Laminar Air Flow. [2]
- e Define Cryopreservation. [2]
- f What are the parts of a Freeze Drying Instrument? [2]
- g What is magnification of a Microscope? [2]
- h What are the essential parts of a Colorimeter? [2]
- i What is the principle of Centrifugation? [2]
- j What is the role of Incubator in Biology? [2]

PART – B**Answer any FIVE questions. All questions carry equal marks**

10 * 5 = 50 Marks

2. Explain the major steps involved in solving analytical problems. [10]
3. Give suitable examples to explain the use of chemicals for Sterilization. [10]
4. What are the steps involved in Lyophilisation? [10]
5. What is Vitrification and slow programmable freezing in Cryopreservation? [10]
6. Write about Beer Lambert's Law. [10]
7. Describe the different types of Centrifuge Rotors. [10]
8. Write about the working of a Thermometer. [10]
